Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-15. (Canceled)

16. (Currently Amended) An apparatus for coating an outer peripheral surface of a pillar structure ~~which is provided with~~ comprising:

a holding means which holds the pillar structure in nearly vertical direction and rotates together with the held pillar structure on an axis of nearly vertical direction as a common rotating ~~axis,~~ axis;

a supplying and coating means which is disposed at a given position with respect to the outer peripheral surface of the pillar structure and supplies a coating material to the outer peripheral surface of the rotating pillar structure and coats the coating material on the outer peripheral ~~surface,~~surface;

and a smoothing means which smoothes the coating surface of the coating material supplied to and coated on the outer peripheral surface,

wherein the supplying and coating means has a nozzle having an opening in the form of a slit for supplying the coating material toward the outer peripheral surface and coating the coating material thereon and the opening of the nozzle is disposed in nearly vertical direction with the position of the upper end of the opening being nearly the same as the position of the upper end of the pillar structure and has a length in longer direction which is shorter than the length between the both ends of the pillar structure, and

the smoothing means has a length in longer direction which is not shorter than the length between the both ends of the pillar structure and is disposed in nearly vertical direction in such a state as keeping a given distance from the outer peripheral surface or contacting with the outer peripheral ~~surface,~~ surface and a lower portion formed from a

distance between a lower end of the smoothing means and a position being nearly the same as the position of the lower end of the opening that corresponds to a lower side of the outer peripheral surface of the pillar structure, and

wherein the coating material is supplied from the opening of the nozzle to the upper side of the outer peripheral surface of the pillar structure and coated thereon, and the coating surface of the coating material supplied and coated is smoothed between the upper side and lower side of the outer peripheral surface and ~~the~~ a longer side end portion of the smoothing means to form a uniform coating surface on the whole outer peripheral surface of the pillar structure.

17. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 16, wherein the length of the opening of the nozzle in longer direction is 30-80% of the length between the both ends of the pillar structure.

18. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 16, wherein the holding means has a pedestal which holds the pillar structure in the vertical direction placed thereon with one end thereof facing downward.

19. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 18, wherein the holding means has a cam which presses downwardly another end of the pillar structure held on the pedestal and rotates on the axis of the nearly vertical direction as a common rotating axis.

20. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 19, wherein the outer peripheral shape of the pedestal and that of the cam are nearly the same.

21. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 18 ~~which is further provided with~~further comprising a

centering means which holds the pillar structure and the pedestal and/or ~~the~~ a cam in a given positional relation.

22. (Currently Amended) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 18 ~~which is further provided with~~further comprising a following means which drives the smoothing means following the outer periphery of the pedestal and/or ~~the~~ a cam so that the smoothing means is disposed at a given position with respect to the outer peripheral surface of the pillar structure.

23. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 22, wherein the following means has first and second following rollers which are disposed at a given distance from each other and move backward and forward following the outer periphery of the cam while contacting with the outer periphery of the cam together with the supplying and coating means and the smoothing means, and the first and second following rollers are disposed so that the angle formed by a line passing through the centers of the respective rollers and the smoothing means is a given angle.

24. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 23, wherein the following means further has third and fourth following rollers which move backward and forward following the outer periphery of the pedestal while contacting with the outer periphery of the pedestal together with the supplying and coating means and the smoothing means, and the rotating axis of the third following roller and that of the first following roller are common and the rotating axis of the fourth following roller and that of the second following roller are common.

25. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 18, wherein the outer periphery of the pedestal and/or the cam comprise stainless steel or ceramics.

26. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 16 wherein the smoothing means comprises stainless steel or wear-resistant ceramics.

27. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 16, wherein the shape of a section of the pillar structure cut along a plane perpendicular to the direction of the central axis of the pillar structure is circular or elliptical.

28. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 16, wherein the pillar structure is a honeycomb structure comprising a plurality of cells which serve as flow paths for fluid.

29. (Previously Presented) An apparatus for coating the outer peripheral surface of a pillar structure according to claim 16, wherein the supplying and coating means and the smoothing means can rotate together along the outer periphery of the pillar structure.

30. (Currently Amended) A method for coating outer peripheral surface of a pillar structure using an apparatus for coating the outer peripheral surface of a pillar structure as recited in claim 16, ~~wherein the method comprising the steps of~~comprising:

holding the pillar structure by the holding means, supplying a coating material from the supplying and coating means on the outer peripheral surface of the pillar structure and coating the coating material thereon while rotating the pillar structure and the holding means on the axis of nearly vertical direction as a common rotating axis, and

smoothing the coating surface of the supplied and coated coating material between the outer peripheral surface and the longer side end portion of the smoothing means.